

Notice of Allowability

Application No.

10/007,159

Examiner

Brian J. Sines

Applicant(s)

CARR ET AL.

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1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response filed 12/23/2003 and including the terminal disclaimer submitted 1/8/2004.
2. ☒ The allowed claim(s) is/are 1-4,6-15,17 and 18.
3. ☒ The drawings filed on 12/4/2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

DETAILED ACTION

Allowable Subject Matter

Claims 1 – 4, 6 – 15, 17 and 18 are allowed.

The following is an examiner's statement of reasons for allowance:

The cited prior art neither teach or fairly suggest an integrated biochemical sensor package comprising: a platform; a waveguide having an upper surface affixed to the platform, wherein the waveguide comprises a thin layer of a chemical coating affixed to the upper surface; first and second reflective fixtures coupled to opposite extremes of the waveguide and touching the platform; a light source within the package, wherein the light source is arranged to emit light towards the first reflective fixture; and a detector within the package and near the second reflective fixture.

The cited prior art neither teach or fairly suggest a miniaturized integrated biochemical sensor comprising: a sensor platform having a substantially rectangular box shape form, wherein the platform has a substantially flat upper surface and at least one end; a waveguide coupled to the upper surface of the platform, wherein the waveguide has a first end and a second end opposite from one another; a first reflective fixture coupled to the first end of the waveguide and touching the upper surface of the platform; a second reflective fixture coupled to the second end of the waveguide and touching the upper surface of the platform; a light source embedded in the platform under the first reflective fixture; and a detector embedded in the platform opposite the light source about one end of the platform and underlying the second reflective fixture.

The cited prior art neither teach or fairly suggest a sensor package comprising: a substantially rectangular device platform; a light transmissive waveguide coupled to an upper

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surface of the platform and a surface with an indicator chemical coat deposited thereon; first and second reflective fixtures coupled to opposite ends of the waveguide positioned about the platform; a lead frame embedded in the platform and having a plurality of pins extending out from one end of the platform, wherein the lead frame having a first dimple underlying the first reflective fixture and a second dimple underlying the second reflective fixture; a light source sitting in the first dimple under the first reflective fixture; and a detector sitting in the second dimple under the second reflective fixture, wherein the detector is configured about the platform to optically receive light from the light source via the first reflective fixture through the waveguide and then through the second reflective fixture.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Sines whose telephone number is (571) 272-1263. The examiner can normally be reached on Monday - Friday (11:30 AM - 8 PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is not available.


Jill Warden
Supervisory Patent Examiner
Technology Center 1700

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